Committee on Resources

Subcommittee on Fisheries Conservation, Wildlife and Oceans

Statement

TESTIMONY OF AL BURCH, EXECUTIVE DIRECTOR, ALASKA DRAGGERS ASSOCIATION BEFORE THE U.S. HOUSE OF REPRESENTATIVES

CHAIRMAN DON YOUNG, ALASKA

CHAIRMAN JIM SAXTON, NEW JERSEY

SUBCOMMITTEE ON FISHERIES CONSERVATION, WILDLIFE AND OCEANS

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INTRODUCTION

I appreciate the opportunity to speak before this subcommittee. I am Al Burch, executive director of the Alaska Draggers Association in Kodiak, Alaska. Most of the trawl vessels I represent, including my own two trawlers the Dawn and the Dusk, are small trawlers under 100 feet in length and most are owned by Kodiak residents.

PERSONAL HISTORY

I started fishing shrimp out of Seward with my brother Oral in 1960. When our plant was destroyed by the 1964 earthquake we moved to Kodiak. During those early years we did what ever we could to keep the boat busy: a little crab, shrimp, salmon, halibut, charters, seals and sea lion reduction. In those days there was a bounty on harbor seals and the bounty helped put food on the table. Sea Lions were considered predators on salmon. Prior to the start of the salmon season the Navy and Army would strafe the sea lion rookeries as a public service.

In the mid-1970's there was a big change in the Central/Western Gulf of Alaska. Shrimp and crab started to disappear. Fortunately Alaska Department of Fish and Game had kept two Kodiak bays closed to shrimp fishing as controls. The shrimp in these bays disappeared just as fast as the shrimp in the open bays, so we knew it wasn't the fishery that caused the decline.

Without shrimp we had to look for other opportunities and got a job fishing Pacific cod for a Portugese joint venture and went on to fish joint venture pollock in Shelikof Strait. When the local processing plants geared up to process groundfish we fished, and still fish, for the Kodiak shorebased plants.

THE MID-1970'S

During the years that shrimp and crab declined there were a lot of other things that changed. The water

warmed up. One summer we had sea lions diving on our trawl nets. They could really tear up a net. I think our crews spent as much time mending web as they did fishing.

Before shrimp started to decline the shrimp catches were pretty clean. We didn't catch very many other species. But in the mid-1970's we started seeing a lot of small pollock in our shrimp trawls. I really remember that because trying to separate the little pollock out of the catch was a real problem for the boats and for the plants. Before the mid-1970's we didn't see much pollock. The foreign vessels fished pollock, but pollock was offshore in those days.

The other thing that happened was a build-up of pollock in Shelikof Strait in the spring. In 1977 my brother called NMFS and asked them to come out and look at Shelikof Strait. The director at that time told him there wasn't any pollock in Shelikof Strait. About two years later NMFS did look at Shelikof Strait and figured out that there was more than a million metric tons of pollock spawning there. At that moment NMFS decided that all the pollock in the Gulf spawned in Shelikof. It wasn't true, but a lot of research was done on the idea that all the Gulf pollock spawned in Shelikof Strait.

THE COMMUNITY OF KODIAK

Kodiak is a fishing dependent community. It is the only port in Alaska whose fleet is composed of all gear types; the only port that processes all fisheries from pollock to urchins; the only port in Alaska that operates year round and the only port in Alaska with a resident processing workforce. Our homes are here. Our children are raised here.

Any downturn of Kodiak's economy is hardest on the processing plant workers. If there is not work most of the year the processing plant workers have to leave. The vessels struggle but not all economically survive. When survival is difficult some vessel owners can't afford to properly maintain their vessels and there are more accidents at sea, more loss of life.

When the economy turns sour small businesses fail. The whole community feels the economic stress and the usual social problems that are part of any economic downturn occur -- the community begins to come apart.

I know what it is like in an economic downturn. Kodiak went through a major downturn in the 1980's when the shrimp and crab fisheries were lost and the processors had not made the investments to buy the machinery to process groundfish.

THE CURRENT CRISIS

I've been in jeopardy on the water a few times. But the jeopardy I, and many like me, now face is the prospect of losing everything we worked for all our lives. To protect sea lions we are being closed out of the near shore waters.

In the Gulf of Alaska I'm not sure we can find much pollock offshore but I am sure that fishing offshore represents a real danger to our boats and crews.

It isn't just the Kodiak pollock fleet that faces jeopardy, it's every fishery that is at risk. The marine mammal biologists have indicated they will be looking at other fisheries -- maybe Pacific cod next or maybe herring. Even salmon fishermen are concerned that their fisheries may be closed in the future to protect sea lions.

When nature took away the shrimp and crab it was a trade -- pollock for shrimp, codfish for crab. If

National Marine Fisheries Service would hire the Kodiak pollock fleet to monitor the sea lion haul-outs I would consider that a reasonable trade, otherwise I think "mugging" probably describes my view.

CONSERVATION

Kodiak's pre-State history left Kodiak with a strong conservation ethic. The Russians wiped out the fur bearing marine mammals. Whalers wiped out the whales. The federal government mismanaged salmon. The foreign fisheries wiped out the Pacific Ocean Perch. All of these species have been rebuilt, sometimes at great short term cost to our community.

The community of Kodiak has willingly paid the price for the rebuilding. All of us want a healthy ecosystem and sustainable fisheries for ourselves today and all future generations.

When I started fishing I thought that if we made sure to leave enough shrimp on the grounds the shrimp would never disappear. We did not know anything about regime shifts then.

It took years for the scientists to figure out that the change from shrimp and crab to groundfish was a natural event that probably occurs every 20 years or so. It took me less time to figure out that if the shrimp were all in the bellies of the cod fish that I should figure out how to fish cod fish.

I think most everyone in Kodiak knew that sea lions were declining in the 1980's. It seemed like just another of the changes that nature had decided to make. Industry pressured National Marine Fisheries Service to start the threatened designation before an environmental group filed suit. The agency did not do anything until Greenpeace filed a lawsuit in 1991. At that time ten mile no trawl zones around the rookeries were implemented.

All the industry groups, including Alaska Draggers Association, worked hard to stop any shooting of sea lions. Trawlers made changes to avoid catching sea lions in their nets.

Back then we asked the agency what other measures might be implemented if sea lions did not start recovering. The agency always said there was nothing more they would do.

THE SCIENCE

I've been a member of the North Pacific Fishery Management Council's Advisory Panel for 22 years. Every conservation action the Advisory Panel has ever recommended and every conservation measure the Council has recommended has been based on scientific research and the recommendations of the Science and Statistical Committee -- except for the Sea Lion Protective measures.

I've listened to all the marine mammal biologists presentations and asked questions and as near as I can tell the only real data is:

- 1. Sea lions populations declined greatly during the 1970's and 80's while pollock increased.
- 2. Sea lions are still declining in the 1990's, but at a much lower rate than in the 1980's.
- 3. The declines are lowest where there is the greatest diversity of diet.
- 4. In most areas pollock is now the major food item for sea lions.

5. Research by Dr. Andrew Trites indicates that sea lions lose weight if pollock is the only food they eat. (This finding has been dismissed by NMFS since the paper has not yet finished its peer review).

The marine mammal biologists current theory as I understand it is that the pollock fishery, which in the Gulf of Alaska takes 7 to 10% of the pollock biomass spread out in three separate openings, each lasting 3 to 20 days, depending on the quota, creates "localized depletion" of pollock. The biologists admit that they have no data to show localized depletion but they believe that is the problem. Apparently a marine mammal biologist's "belief" carries more weight than any research.

I am very frustrated that though Steller Sea Lions have been declining for over 20 years there has not been a thought out comprehensive research plan to look at diet, nutritional needs, changes in available prey nor what sea lions do in the winter months. Most all the research work has been done in the summer, yet the pollock fishery is basically a winter fishery.

It has been about eight years since the Steller Sea Lions have been listed. And after eight years of research all the marine mammal biologists can say is "we believe localized depletion of pollock caused by the fishing industry is the problem". I have kind of lost faith in the ability of leadership in the agency to provide the research we need. There are many good scientists in the agency, but they are not the leadership. I would feel more comfortable if Congress exercised annual oversight and included scientists outside National Marine Fisheries Service in the oversight.

If there is not a long term coordinated research plan developed that looks at what sea lions do every month of the year we will continue for the next twenty-five years hearing "there is not enough data" or "the sample size is too small to be meaningful" and our communities will be extinct but the Steller Sea Lion will still be around.

APPENDIX TO WRITTEN COMMENTS BY AL BURCH,

EXECUTIVE DIRECTOR, ALASKA DRAGGERS ASSOCIATION

One of the things I've learned on the North Pacific Fishery Management Council's Advisory Panel is that observations made by fishermen are called "anecdotal data" and observations made by scientists are "scientific data". To make sure my comments are treated as "scientific information" I worked with Alaska Groundfish Data Bank to document from the scientific literature my statements about how our ecosystem changed in Kodiak since 1960.

CENTRAL/WESTERN GULF OF ALASKA POLLOCK BIOMASS

Prior to 1976 NMFS made two surveys in the Gulf of Alaska. One in 1961 and one done over the three summers 1973-75. The estimated pollock biomass in the Central/Western Gulf of Alaska from the 1961 survey was 48,000 MT. The 1973 survey biomass estimate was 522,200 MT. (Pereyra, W.T. and L L. Ronholt. 1976)

No further bottom trawl surveys were conducted until 1984. The 1984 trawl survey pollock biomass was estimated at 730,431 MT. The 1984 hydroacoustic survey in Shelikof Strait was estimated to be 1,757,823 MT. The bottom trawl survey does not assess the young year classes well which accounts for the difference between the hydroacoustic survey biomass and the bottom trawl survey. (North Pacific Fishery Management Council 1998).

CENTRAL/WESTERN GULF OF ALASKA CHANGE IN SPECIES COMPOSITION

The 1961 survey indicated that pollock represented 16% of the total round fish biomass. The 1975 survey indicated that pollock represented 76% of the total round fish biomass.

By species group the 1961 survey estimated that of the total fish and invertebrate biomass flatfish, including halibut, represented 38% of the biomass, commercially important invertebrates (crab and shrimp) represented 27% of the biomass and roundfish represented 23% of the biomass.

The 1973 survey results shows that of the total fish and invertebrate biomass flatfish represented 31%, commercially important vertebrates represented 15%, and round fish represented 51%.

The remaining percent of the biomass in 1961 and 1973 represented sharks, rays and forage fish. (Pereyra, W.T. and L L. Ronholt. 1976)

SEA LION DECLINES IN THE CENTRAL GULF OF ALASKA TREND ROOKERY AND HAULOUT SITES: ADULT AND JUVENILE SEA LIONS (Strick, J.M. etal, 1997 and Sease, J.L. 1999)

The Sea lion decline appears to have three phases:

1976 through 1985: Sea lion population declined from 25000 animals to 20000 animals. The average rate of decline for this period was 2% per year. Counts were made in the years 1976 and 1985.

1985 through 1989: Sea lion population declined from 20000 animals to 9000 animals. The average rate of decline for this period was 11%. Counts were made 1985 and 1989.

1989 through 1998: Sea lion population declined from 9000 animals to 5000 animals. The average rate of decline for this period was 4.5%. Counts were made 1989, 1990. 1991, 1992, 1993 1994, 1996, 1997 and 1998.

OTHER CHANGES IN THE CENTRAL GULF OF ALASKA ECOSYSTEM

Though looking only at single species has been the standard for many years, scientists and National Marine Fisheries Service have recognized that the ecosystem as a whole, including the physical oceanography, must be considered in order to assess the causes and impacts of change.

A number of fish eating birds also declined in the same time period that sea lions declined, but the shellfish eating birds did not show a decline. Bird biologists are able to directly sample the food items brought to the nest during breeding season and monitor the breeding success and chick survival directly. They can also monitor large die-offs of birds. The following summary is from K. J. Kuletz, etal, 1997.

In the 1970's there was a shift from a regime typified by high abundance of shrimp, capelin, and Pacific sandfish to one dominated by pollock, cod and flatfish. Concurrent with this shift the following marine bird and mammal species declined.

BIRD SPECIES WHICH DECLINED BY AT LEAST 50% 1989-1993 in Prince William Sound: Loons, cormorants, mergansers, Bonaparte's gull, glaucous winged gull, black legged kittiwake, arctic tern, pigeon guillemots, marbled murrelets, parakeet auklet and puffins. All of these birds feed on fish.

The birds that feed on shellfish such as goldeneyes, harlequin ducks, black oyster catchers did not decline.

MARINE MAMMALS WHICH DECLINED IN PRINCE WILLIAM SOUND: Harbor Seals and Sea Lions. Decrease in killer whales which prey on seals also noted.

The authors state that "The observed long term changes in populations of marine birds and mammals and the data on seabird diets, were consistent with the hypothesis that an ecosystem change occurred in Prince William Sound that negatively affected piscivorous birds." The authors also note that the timing of changes in the Gulf of Alaska was similar to the timing in Prince William Sound.

ALTERNATIVE HYPOTHESIS FOR THE SEA LION DECLINE

NMFS hypothesis is that the pollock fishery deprives sea lion of food by creating localized depletion. Other work suggests that pollock does not provide adequate nutrition for young sea lions. The corollary to this hypothesis is that the decline in forage fish has deprived young sea lions as developed by D.J. Hanson 1997 in an abstract quoted below.

"The decline of the harbor seal, *Phoca vitulina richardsi*, in the western Gulf of Alaska was concurrent with the collapse of the shrimp trawl fishery in the same area between 1976 and 1981. Over the approximately the same time period (1976-1979 to 1985), the rate of decline of specific local breeding populations of the northern sea lion, *Eumetoias jubatus*, increased. Shrimp, slow-moving and relatively easy to catch, have been reported as the primary prey item of newly weaned harbor seal pups, and they may play a similarly important role in the diet of northern sea lion pups; young pinniped pups may need time and practice to acquire the speed and agility to catch fast moving prey to catch fast moving prey such as finfishes. Capelin, *Mallotus villous*, a forage fish of harbor seals and northern sea lions, also declined in abundance in the early 1980's in the western Gulf of Alaska; capelin may be of importance to older pinniped pups, providing a high lipid food source for the build-up of fat reserves for thermal insulation and growth. With the decline in abundance of both shrimp and capelin, young inexperienced harbor seals and sea lions may no longer be able to compete successfully with other predators for these food items. Thus, harbor seal and sea lion pups may be starving after they leave the rookeries."

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